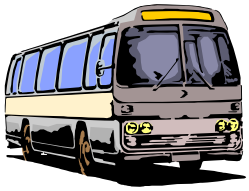
NESTS Transit Planning Project

Summary Report of Market Research



Prepared for the Ithaca-Tompkins County Transportation Council

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Section 1. Purpose

This report presents the summary results of a telephone survey of residents of the northeast subarea of Tompkins County as part of the NESTS Transit Planning Project (NTPP). While this report highlights the most interesting findings of the survey, the wealth of information in the full survey data set will continue to be used to inform the rest of the NTPP and has been made available to ITCTC and TCAT for further analyses as desired.

The ultimate goal of the NTPP is to design improvements to the transit system in this section of Tompkins County that, in conjunction with possible policy changes, would encourage a significant number of people to shift from driving to using transit. The telephone survey sought to obtain quantitative data about the travelers' priorities, values, and needs in addition to gathering information about actual origins and destinations.

Section 2. Methodology

A fifteen-minute telephone survey was designed to target individuals who travel regularly in the ***study area***, which is approximately the area bounded by Cayuga Lake and Route 13A on the west; E King Road and Coddington Road on the south; Ellis Hollow Road, Baker Hill Road, Sheldon Road, and Cobb Street on the east; and East Lansing Road, Searles Road, and Route 34B on the north. The questions were designed to survey both individuals who were regular users of the transit system in this area and non-users. A list of randomly generated telephone numbers in the targeted area was purchased. To ensure a random selection of an adult within a household, interviewers asked to speak with the person in the home over age 18 who had the most recent birthday. The survey was conducted by telephone from the Cornell University Computer-Assisted Survey Team, using a CATI (Computer-Assisted Telephone Interview) system. The questionnaire is included in this report as Appendix A.

Section 3. Survey Respondents

A total of 500 households were contacted in the area including the City of Ithaca, Cayuga Heights, Village of Lansing, Town of Lansing (Not including North Lansing or Lansingville), Dryden within ZIP code 14850, Caroline within ZIP code 14850, and the Town of Ithaca, (east of downtown Ithaca & the Northeast area).

The response rate is 70%. We are 95% certain that a survey statistic of 50% will be within +/-5% of a hypothetical survey of all members of the population sampled.

A. Users vs. Non-Users

User status was determined from the response to the following question: "In the past 3 months, have you ridden any bus service in the local Ithaca area, such as that operated by TCAT?"

One third of the respondents said they used a bus service in the study area (see Table 1).

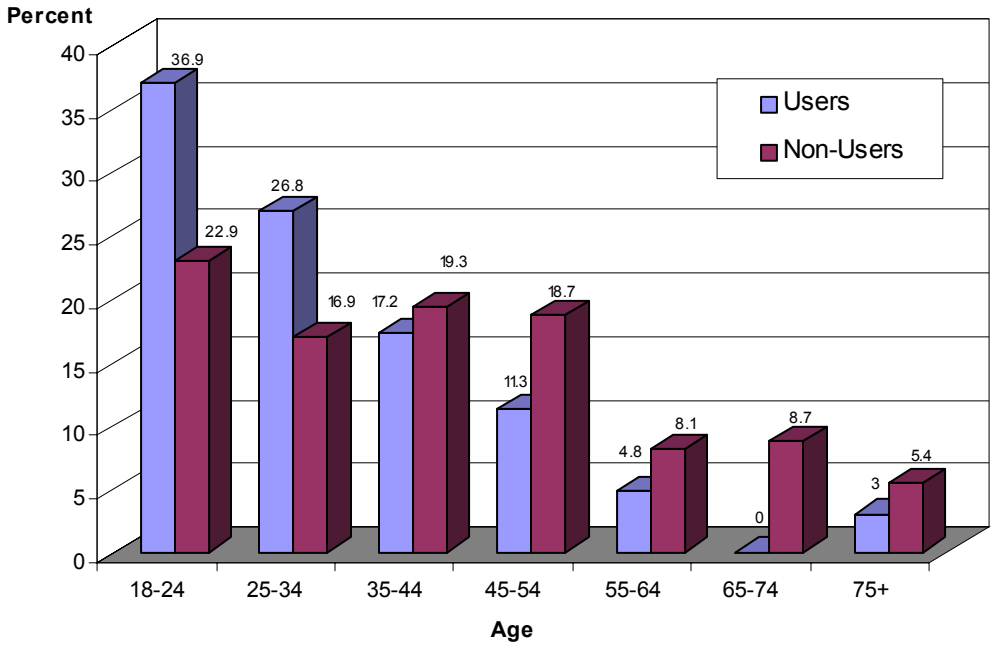
Table 1. Distribution of Respondents by User Status

	N	*%*
Users	168	*33.6*
Non-Users	332	*66.4*
Total	500	*100.0*

There was a statistically significant difference by age of users and non-users, with users being younger--more of them being less than 35 years of age (see Graph 1), by marital status (see Table 2), with more users being "single" (either never married, widowed, or divorced), and by income (see Tables 3 and 4) with users having less income. There was no significant difference of use of transit by gender (see Table 5).

Of those who do not use a transit service, statistically significantly more men (58%) than women (45%) travel to the study area for work (p=.0045); and significantly more men (40%) than women (32%) travel to the study area for school (p=.0801).

Graph 1. Distribution of Respondents by Age and User Status



* χ^2 test of association, p< .001

Table 2. Distribution of Respondents by Marital Status and User Status

	Married/Partnered		Divorced		Widowed		Single/ Never Married		Total	
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
Users	50	*30.1*	14	*8.4*	3	*1.8*	99	*59.6*	166	*33.6*
Non-Users	143	*43.5*	22	*6.7*	17	*5.2*	147	*44.7*	329	*66.4*
Total	193	*38.9*	36	*7.3*	20	*4.0*	246	*49.7*	495	*100.0*

* χ^2 test of association, p< .0036

Table 3 . Distribution of Respondents by Dichotomous Income Categories and User Status

	Above $60K		Below $60K		Total	
	N	*%*	*N*	*%*	*N*	*%*
Users	26	*16.6*	131	*83.4*	157	*34.3*
Non-Users	101	*33.4*	200	*66.6*	301	*65.7*
Total	127	*27.7*	331	*72.3*	458	*100.0*

*χ^2 test of association, p< .0001

Table 4 . Distribution of Respondents by Income Categories and User Status

	Less than $20K		$20-$40K		$40-60K		$60-80K		$80-100K		$100K +		Total	
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
Users	61	*41.5*	50	*34.0*	15	*10.2*	10	*6.8*	7	*4.8*	4	*2.7*	147	*35.0*
Non-Users	65	*23.8*	64	*23.4*	61	*22.3*	27	*9.9*	23	*8.4*	33	*12.1*	273	*65.0*
Total	126	*30.0*	114	*27.1*	76	*18.1*	37	*8.8*	30	*7.1*	37	*8.8*	420	*100.0*

*χ^2 test of association, p< .0001

Table 5. Distribution of Respondents by Gender and User Status

	Male		Female		Total	
	N	*%*	*N*	*%*	*N*	*%*
Users	72	*42.9*	96	*57.1*	168	*33.6*
Non-Users	137	*41.2*	195	*58.7*	332	*66.4*
Total	209	*41.8*	291	*58.2*	500	*100.0*

*χ^2 test of association, p< .6694

Section 4. Non-Users

A total of 332 respondents, or two thirds of all respondents, were non-users of transit. Of these, half (or 178) said they work in the study area and about one in three (or 95) said they go to a university or college in the study area.

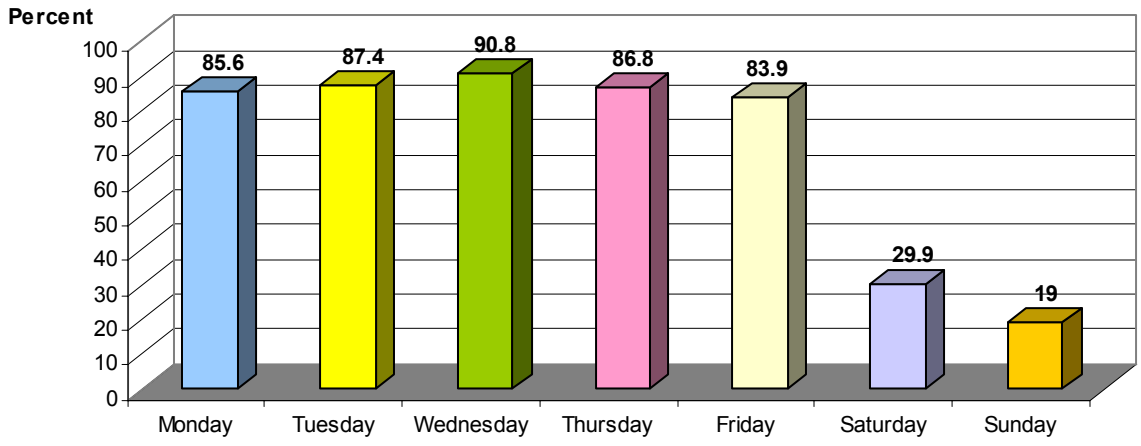
A. Non-Users that Work

Of non-users that work, three out of four drive their car alone to get to work (see Table 6). The majority, almost 90%, work Monday through Friday (see Graph 2). More than half are offered free parking by their employer (see Graph 3).

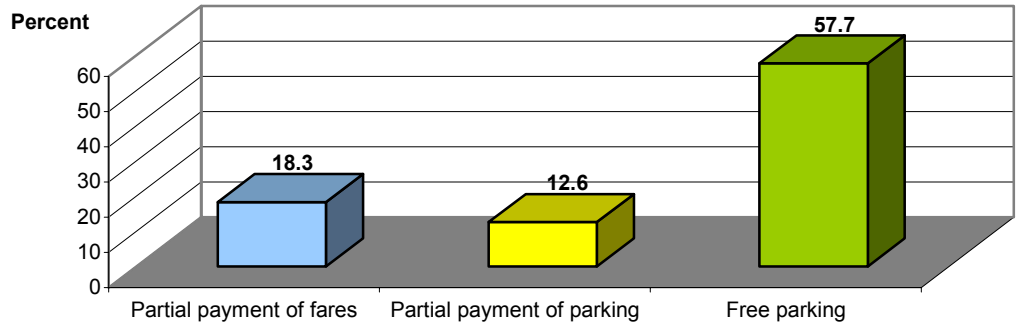
Table 6. Distribution of How Non-Users Travel to Work

	How travels to work	
	N	*%*
Car – Drive alone	131	*75.3*
Get a ride	5	*2.9*
Carpool/Vanpool	5	*2.9*
Taxi	0	*0*
Bike	2	*1.1*
Walk	18	*10.3*
Varies	3	*1.7*
Other	10	*5.7*

Graph 2. Distribution of Days of Week Non-Users Go to Work



Graph 3. Distribution of Types of Benefits Offered by Employer to Non-Users



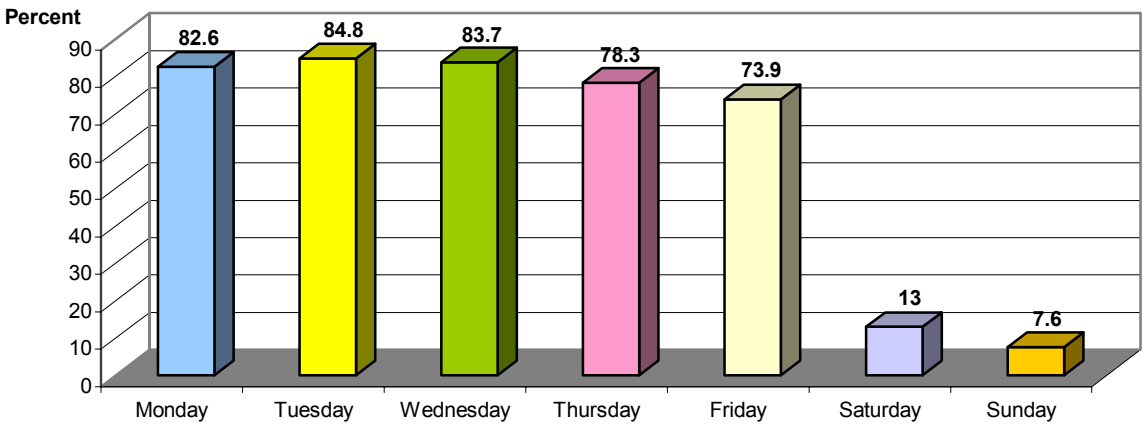
B. Non-Users that Go to School

Almost half of all respondents who are non-users of transit and go to school (meaning a university or a college), go to school by car (driving alone) and another third said they walk to school (see Table 7). Statistically significantly more females (65%) than males (29%) drive a car to school alone (p=.0075). The majority, almost 75%, go to school Monday through Friday (see Graph 4). Approximately one in four non-users said their school offered them any type of parking assistance to them (see Graph 5), which is a much lower percentage than for workers.

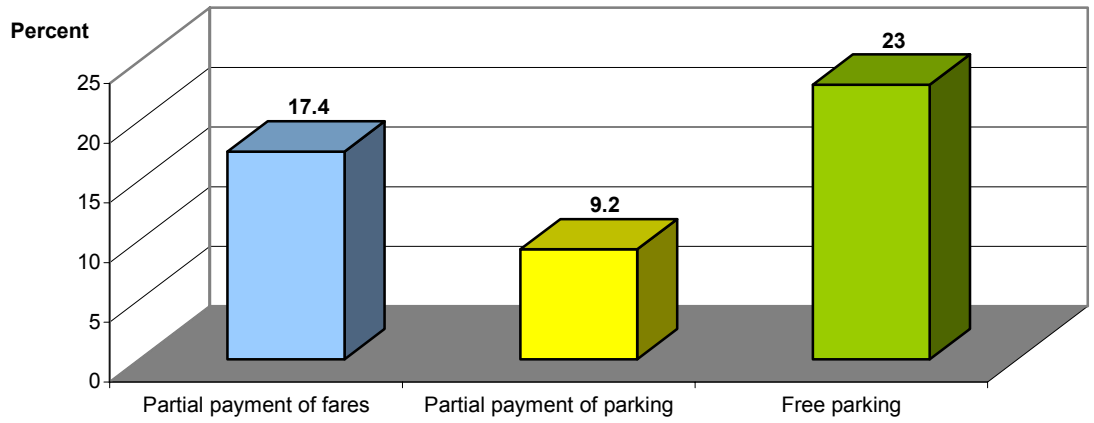
Table 7. Distribution of How Non-Users Travel to School

	How travels to school	
	N	*%*
Car – Drive alone	43	*47.8*
Get a ride	2	*2.2*
Carpool/Vanpool	4	*4.4*
Taxi	0	*0*
Bike	5	*5.6*
Walk	31	*34.4*
Other	5	*5.6*

Graph 4. Distribution of Days of Week Non-Users Go to School



Graph 5. Distribution of Types of Benefits Offered by School to Non-Users



C. Non-Users' Service Preferences

Fifty-nine percent of non-users said they would use transit for at least some trips *if transit services were available so it was easy to use, convenient, inexpensive, and information about using it was readily available.* Of these, 72% said they would use it only occasionally or rarely. Approximately 40% of non-users said that they would be most likely to use public transit service for each of the following purposes: work, shopping, social/recreational and personal business (see Table 8).

Respondents were given the following baseline bus service and asked how likely they would be to ride this service on a scale of 1 to 10:

- Monday-Saturday 7:00 a.m.-9:00 p.m.
- Regular large diesel buses
- Runs every 30 minutes
- To downtown Ithaca, Cornell, 1 ride – other areas need transfer
- $1.00 adults, 75¢ children, 50¢ seniors
- Travel time 20 minutes longer than driving car

Table 8. Distribution of the Type of Trip Non-Users are Most Likely to Use Transit

	N	*%*
Work	78	*39.8*
Business related to work	34	*17.3*
School/university classes	72	*36.7*
Shopping	85	*43.4*
Social/Recreational	87	*44.4*
Personal Business	81	*41.3*
Religious	25	*12.8*
Other	9	*4.6*

Respondents were then asked to compare various potential services to the baseline service and indicate how likely they would be to ride such services. The results of this comparison are shown in Table 9. A positive difference means that people would be more likely to ride the potential service than the baseline service, and the greater the difference, the more likely they would be to ride it. A negative difference means that they would be less likely to ride the potential service than the baseline service.

The likelihood of a non-user taking public transit would improve if the service ran every 10 minutes rather than every 30 minutes, if the travel time took only 10 minutes longer than driving rather than 20 minutes longer, if the fare was $.50 lower, or if they did not have to transfer. The likelihood of taking public transit would decrease if the service ran every day from 7:00 a.m.-7:00 p.m. or if the fare was $.50 higher. There were no significant differences of preferences by gender.

These findings imply that evening service between 7:00 p.m. and 9:00 p.m. is slightly more important than Sunday service (because service every day from 7:00 a.m. to 7:00 p.m. has a negative difference compared to the baseline service), but that Saturday service is more important than late evening service on weekdays (from 9:00 p.m. to midnight), given the negative difference for the "Weekdays 6am to midnight" option.

Table 9. Riding Public Transit Given Added Service

Potential Service	*Difference*
Every 10 minutes	1.70
Took 10 minutes longer than driving	1.70
Fare 50¢ lower	1.38
No transfers	1.37
Every 20 minutes	.81
Smaller, quieter bus	.03
Every day 7am-7pm	-.05
Weekdays 6am-midnight	-.16
Fare 50¢ higher	-.61

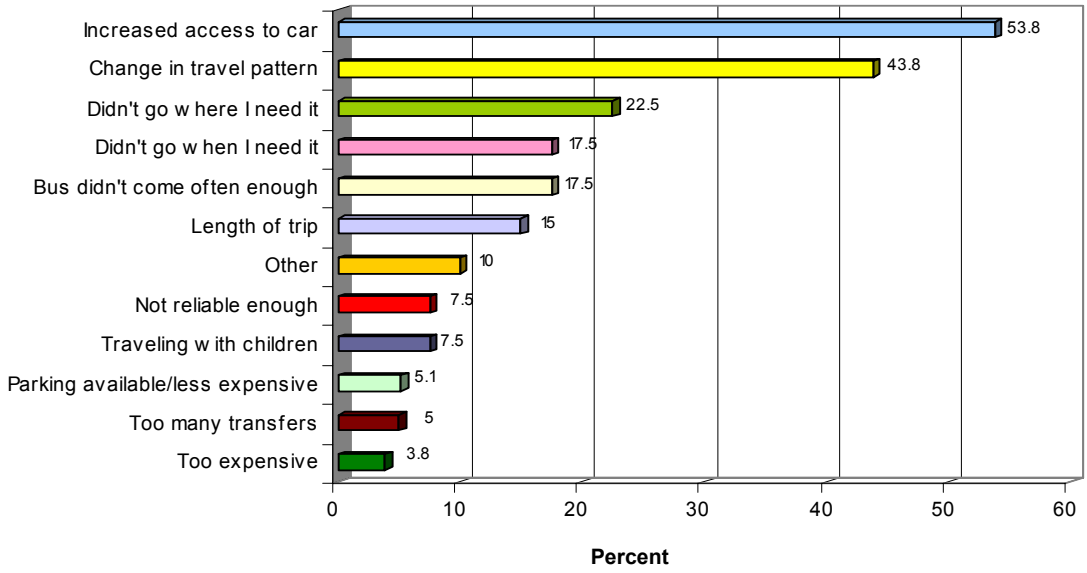
D. Past Behavior

The majority of the non-users, more than 70%, either never used transit in their region or used it over a year ago (see Table 10). Of those that did use transit within the past 6 months (14%), approximately one in three relied on transit to get around at least once per week or more. Of those who hadn't used transit within the past 6 months (86%), the main reason noted by more than half of the respondents was that they had increased access to a car, followed by the fact that their own travel patterns had changed (see Graph 6).

Table 10. Distribution of the Last Time Non-User Rode Transit in their Region

	N	*%*
Within past 6 months	45	*14*
At least 6 months but less than 1 year	47	*14*
More than 1 year ago	137	*41*
Never	103	*31*

Graph 6. Distribution of Non-Users Reasons for Not Using Transit – Had Not Used Transit in Past 6 Months

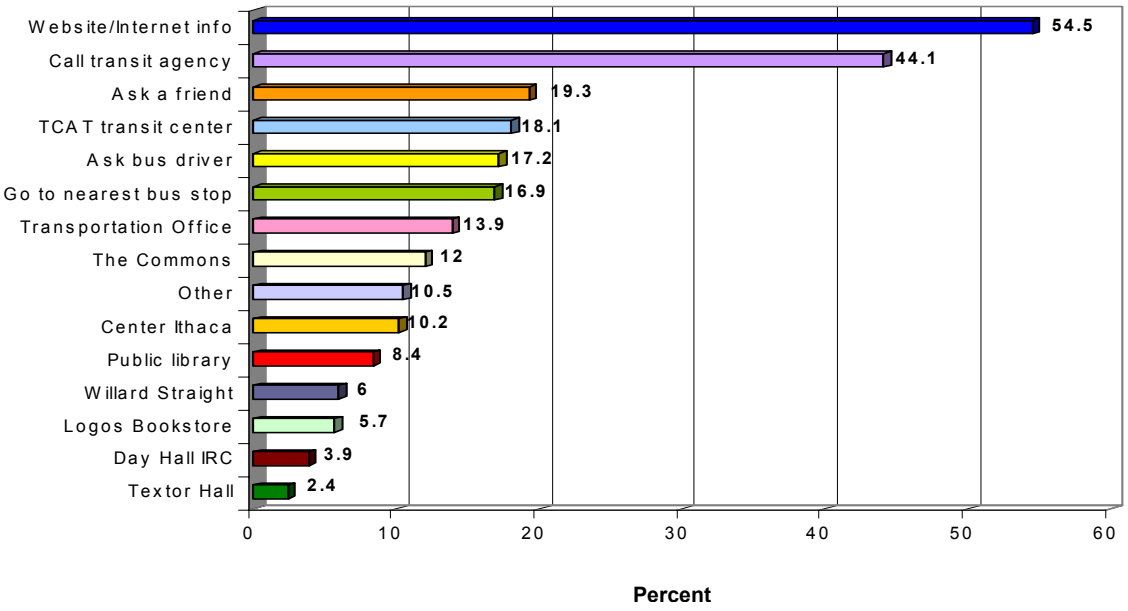


E. Information Services/Drawbacks to Using Transit

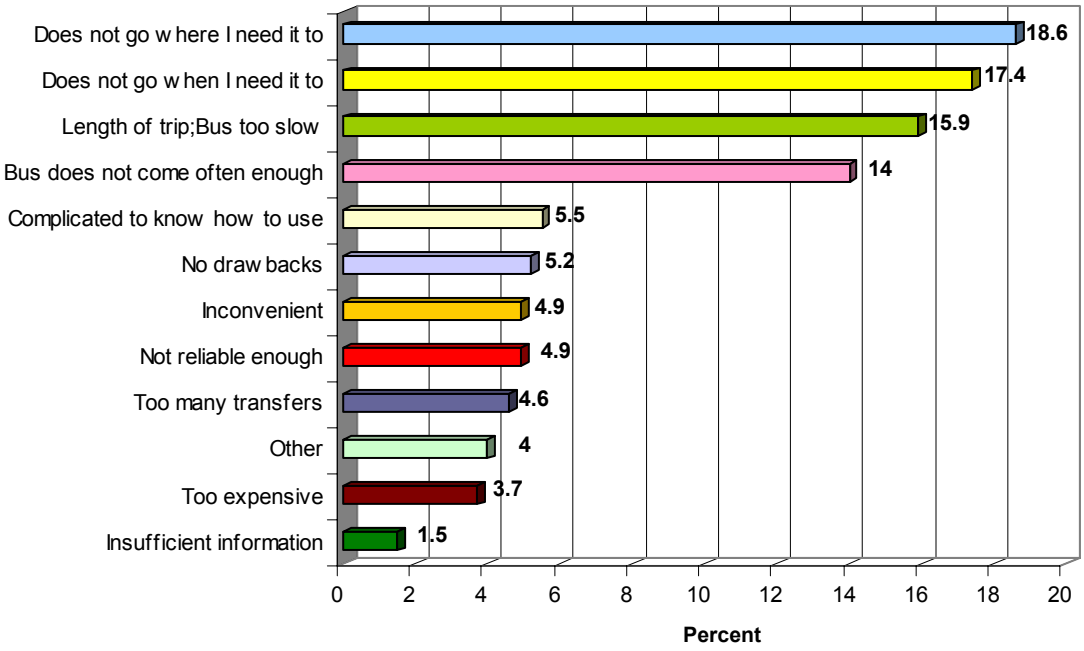
More than half of all non-users would obtain information about transit routes and schedules from the internet, while 44% said they call the transit agency to get information (see Graph 7).

Asked what was the biggest drawback to using transit – almost one out of five non- users said it was because it did not go where they need it to go (coverage), followed by 17% saying it does not go when they need it to go (span), (see Graph 8). Nearly as important are travel time and service frequency.

Graph 7. Distribution of Sources of Information on Transit Routes – Non-Users



Graph 8. Distribution of Biggest Drawbacks to Using Transit – Non-Users



F. Potential to Become a Regular Rider

In order to seriously consider becoming a regular transit user, the non-users indicated that a large increase in traffic congestion and the ability of transit to be able to get around the congestion as the most important change to cause them to ride the bus followed by restrictions to driving in certain areas (see Graph 9) . Over half said that they would consider becoming a regular rider if transit were able to get around congestion, even if traffic stayed the same.

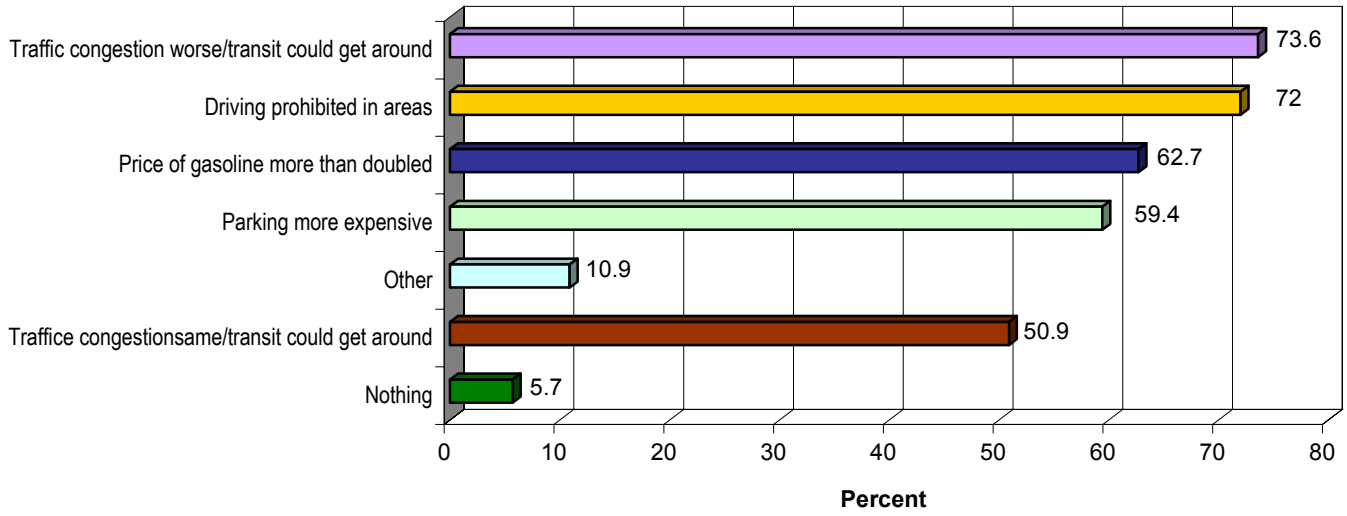
One in ten non-users said that if they could park for free at a remote lot and have an express shuttle to their destination they would be willing to become a regular transit user, even if the daily charge for parking at their destination did not increase. Another 12% said they would be willing if the daily charge for parking increased only by $1 per day, 15% more said they would be willing if the daily charged increased by $2, and another 9% said they would be willing to become a regular transit user if the daily charge increased by $3 per day.

Forty-three percent of non-users said they would ride the bus somewhat or much more often than they do now if an EZPass-type program were available. Such a program would establish accounts for transit users and instead of paying a cash fare or buying a monthly pass, their transit usage would be charged to their credit card. (Offering free use of emergency transportation did not significantly increase the interest in the EZPass-type Program.)

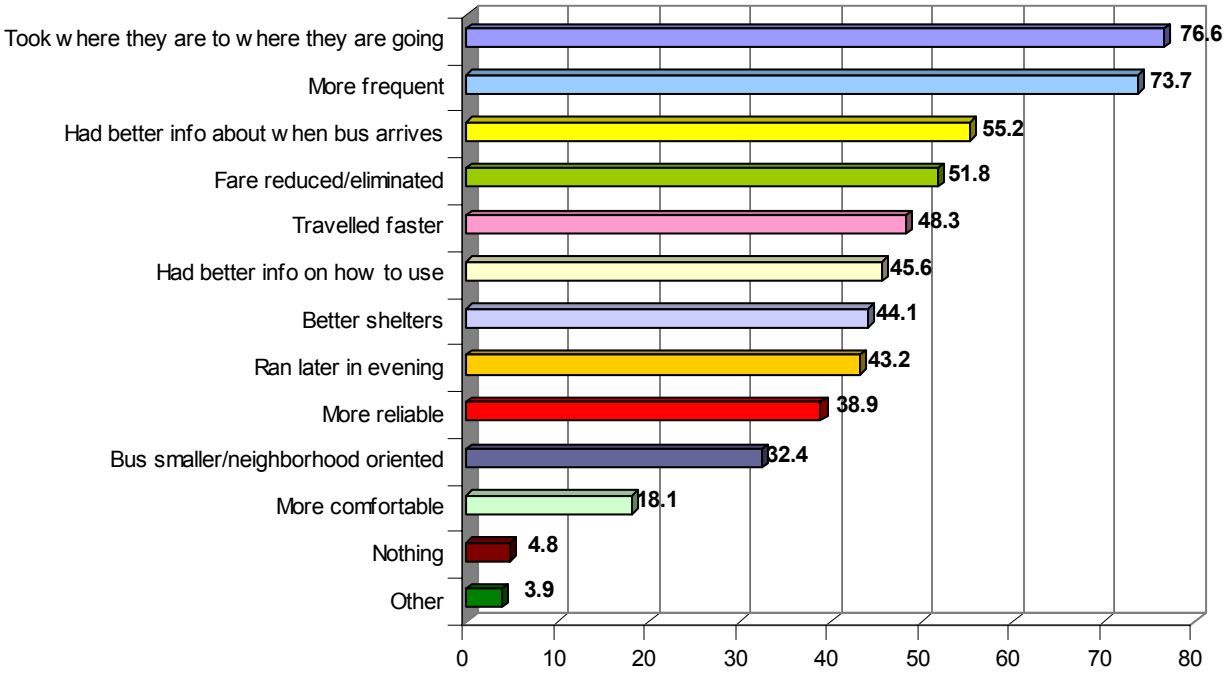
Approximately half of the non-users said they would ride the bus somewhat or much more often than they do now if a flexible transit service were offered that could leave its basic route to pick up or drop off passengers closer to their homes or other destinations before returning to its route.

The 59% of non-users who said they would consider taking transit if it were easy to use, convenient, inexpensive, and information about using it was readily available, were then asked what changes specifically to the transit service would make them more willing to use transit for at least some trips. The majority, about three out of four, said they might be more willing to use transit for at least some trips if the service took them from where they are to where they need to go and if the service were more frequent (see Graph 10).

Graph 9. Distribution of Transportation-Related Changes Before Considering Becoming a Regular User



Graph 10. Distribution of Changes to Transit that Would Increase Non-Users Use



Section 5. Users

Trip Purpose and Timing

One third of all respondents were current users of a local public transit service. Approximately 45% of users use transit for each of shopping and going to school; approximately 42% said they use transit for each of going to work and social/recreational reasons (see Table 11). The majority use it every weekday, and Fridays are when users use transit the most (see Graph 11). Transit is used least on Sundays, followed by Saturdays.

Why They Use Transit

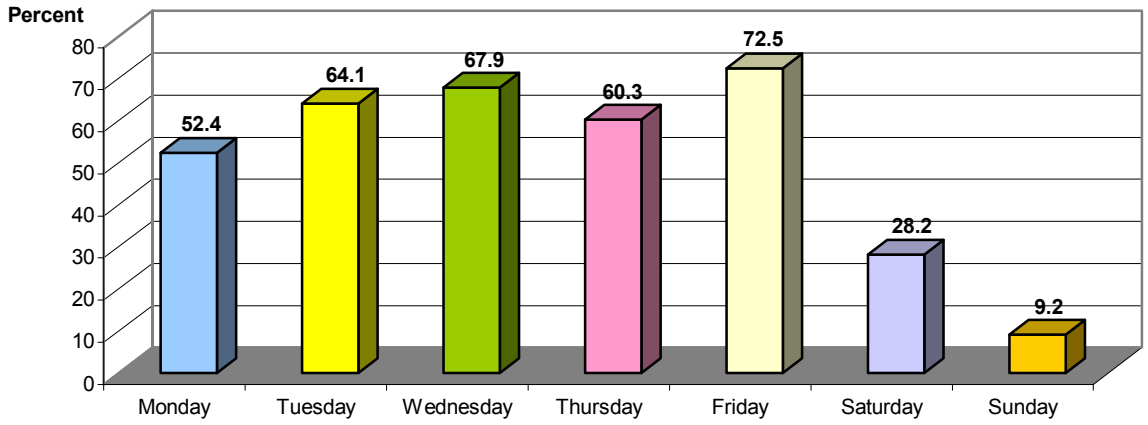
Forty percent of users use transit because they do not have a car. Others choose to use transit. Almost six out of ten users said they use transit because it is hard to find parking, and approximately one out of two said they use transit because parking is expensive. Slightly more than one out of three users said that transit is cheaper than driving (see Graph 12).

Seven out of ten users said they could use transit more than they currently do. Almost 80% of users said that if the service were more frequent they would make more trips on transit; 64% said that if the transit service ran later they would increase their usage; 58% said that if the fare were reduced or eliminated then they would use transit more often (see Graph 13). More than 50% of users said they would use transit (if changes were made) for each of shopping and social/recreational purposes (see Table 12).

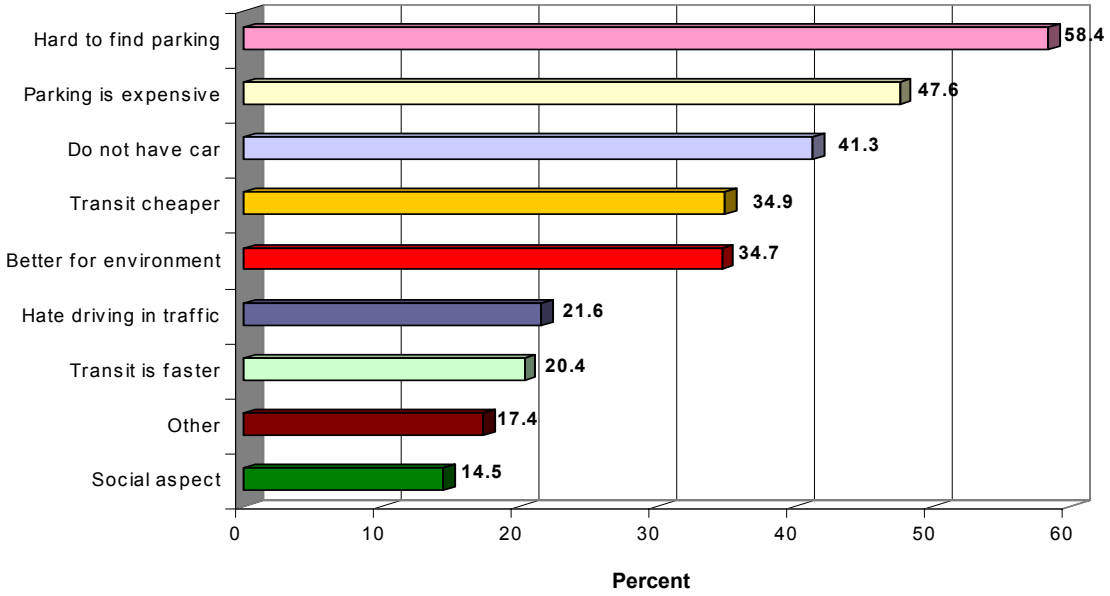
Table 11. Distribution of the Type of Trip Users Use Transit

	N	*%*
Work	72	*42.9*
Business related to work	34	*20.2*
School/university classes	73	*43.5*
Shopping	75	*44.6*
Social/Recreational	70	*41.7*
Personal Business	57	*33.9*
Religious	11	*6.5*
Other	4	*2.4*

Graph 11. Distribution of Days of Week Users Use Transit



Graph 12. Distribution of Reasons Users Use Transit



Graph 13. Distribution of Changes to Transit to Increase User Use

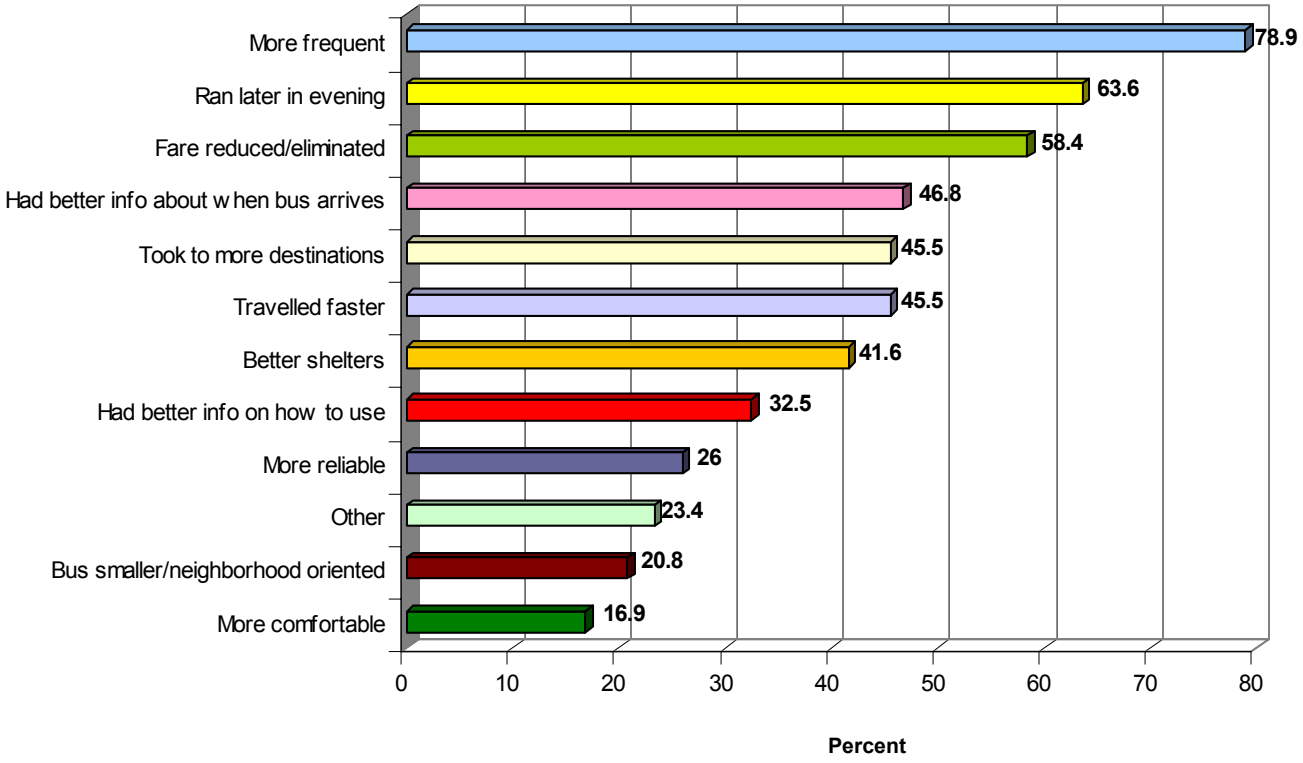


Table 12. Distribution of Types of Additional Trips Users Would Use Transit

	N	*%*
Work	12	*25.5*
Business related to work	16	*26.2*
School/university classes	16	*32.0*
Shopping	25	*54.3*
Social/Recreational	24	*54.5*
Personal Business	17	*33.3*
Religious	14	*18.7*
Other	4	*5.2*

Section 6. Geographic Comparisons

The telephone survey included information about the respondent's home, work and/or school address. Through a process of data "cleaning", and the use of GIS, the geographic locations of 836 addresses were mapped. These include 433 home, 255 work and 148 school addresses.

Since each home, work, and school address was tied to a particular survey respondent, it was possible to analyze the geographic distribution of particular survey questions, and examine attitudinal trends based on the home location of each respondent.

A series of maps were created to display conditions and/or to examine several hypotheses, including:

- The location of the home addresses of users and non-users
- The geographic distribution of respondents based on the service changes they felt were most important
- An initial examination of park and ride service from the area north of Cornell
- The distribution of non-users who would consider using an improved service versus non-users who would not consider using it
- An examination of the location of non-users who say that the bus does not go where they need it.

The following paragraphs summarize the findings from the mapping efforts.

A. Home addresses of users and non-users

There are twice as many non-users as there are users: 146 users and 287 non-users. As shown in Figure 1, users are concentrated in the inner areas of Ithaca while a concentration of non-users is evident in the neighborhood just north of downtown. It appears that many non-users live right on existing bus routes while some users do not.

B. Important service changes

Survey respondents were asked which were the two most important service changes that may make them more likely to use transit for at least some of their trips. Out of a list of eleven specific responses, the two most commonly mentioned responses were:
"If bus service took me between where I am and where I'm going to" and
"If bus service were more frequent."

As shown in Figure 2, within the downtown Ithaca area, there appears to be a concentration of respondents who indicated that "increased bus frequency" may make them more likely to use transit for at least some of their trips. There are also some, but relatively fewer, respondents in the downtown area who said that changes in routes to serve their origins and destinations would make them more likely to use transit.

In the area north of downtown Ithaca, particularly in the Triphammer Road corridor, there seems to be a concentration of respondents who responded that both "increased frequency" and "service to my destination" are important service changes.

Figure 1: Residential distribution of survey respondents
Users versus non-users

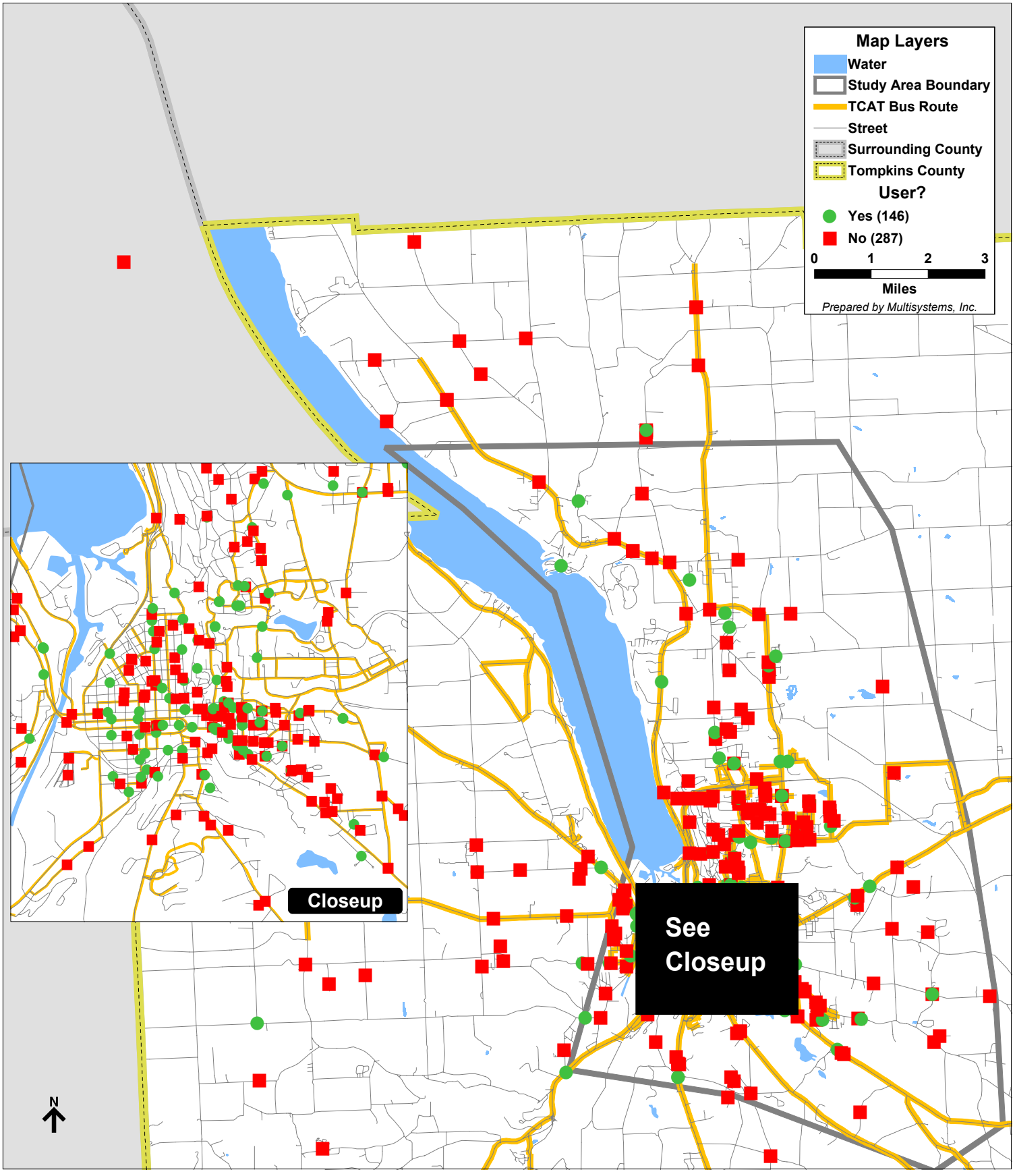
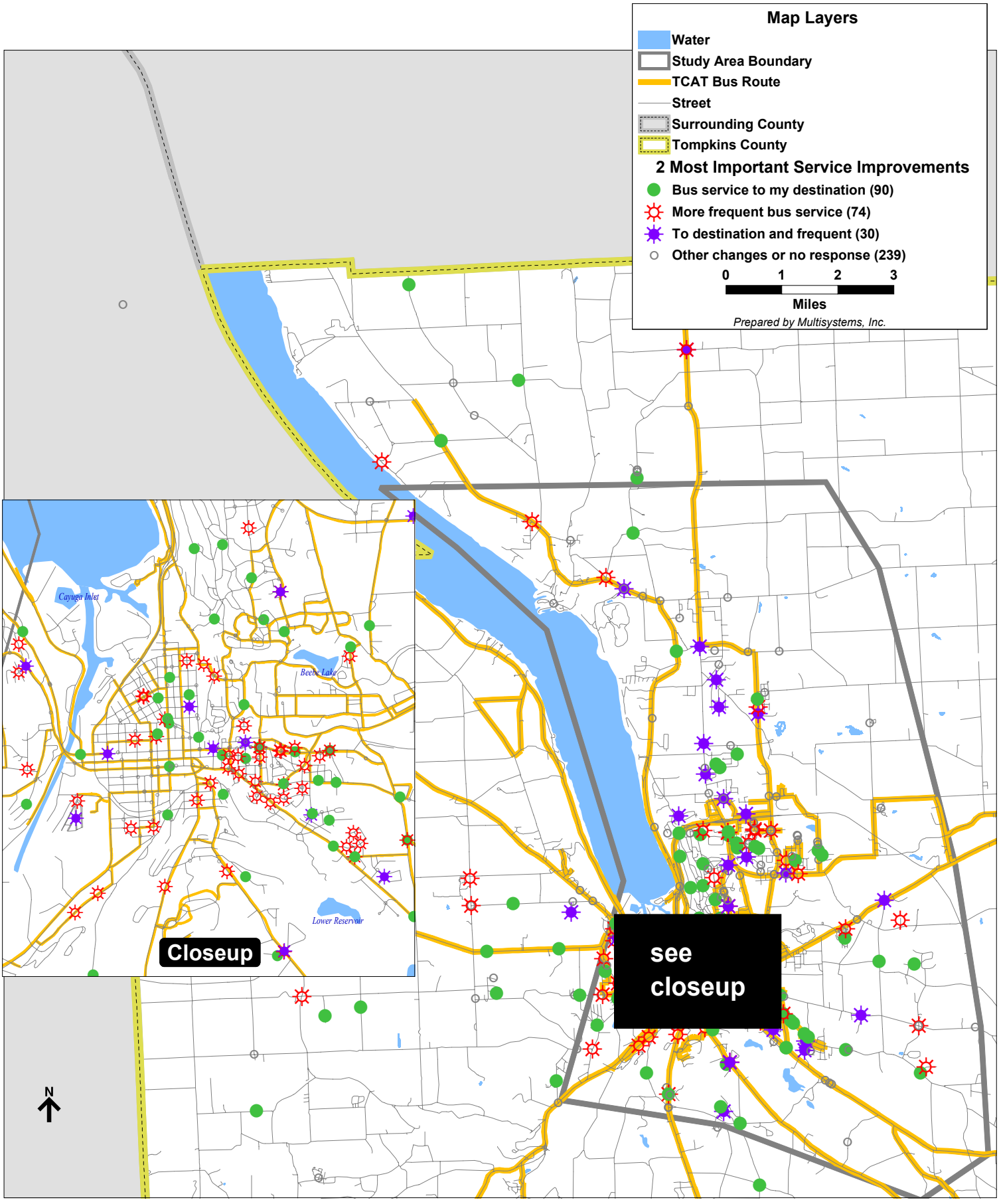


Figure 2: Residential distribution of survey respondents
Two most important service changes that may encourage respondents to use transit for at least some trips



There are also relatively more people who identified "service to my destination" as an important change than "increased frequency".

C. Examination of park and ride service

For respondents who reported that their home address was within a particular area north of downtown Ithaca, a brief analysis focusing on the feasibility of a park-and-ride shuttle was conducted. Respondents were asked the following question:

"Assuming that you could park for free at a remote lot and have an express shuttle to your destination, how much would the daily charge for parking at your destination have to increase to get you to become a regular transit user?"

Respondents who stated that the daily parking fee at their destination would have to be $5 or less are considered to be potential park and ride users. The home addresses of respondents who stated that the daily parking charge would have to be $0 are displayed in Figure 3 as hollow circles; those who stated that the daily parking charge would have to be more than $0 and up to $5 are displayed as solid dots. (Respondents who stated that their daily parking charge would need to be in excess of $5 per day in order to use a park and ride service are not considered to be potential riders and were removed from the subsequent step in this analysis).

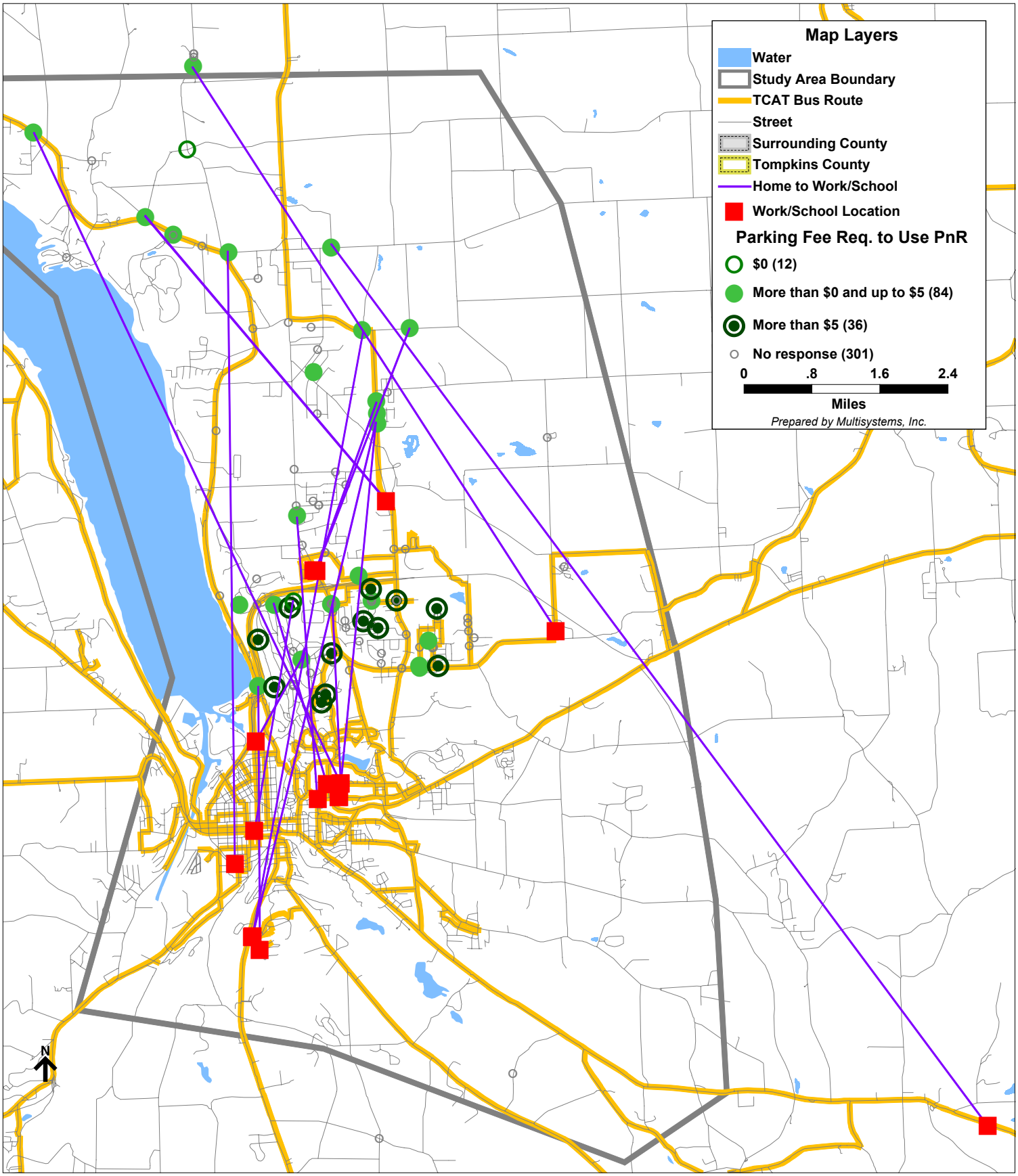
As shown in Figure 3, the associated work or school address was connected with the home location of each potential park and ride user living in the area north of downtown Ithaca. Each respondent's work or school location is shown as a square. Lines connect each home location with the corresponding work/school location. Note that some potential users did not have a specified work/school address or indicated that they work at home. Based on these data, there seems to be a potential for a park and ride lot with service to Cornell University and perhaps to Ithaca College as well. This opportunity will be investigated further in the service planning phase of the study.

D. Other geographic analyses

Other analyses proved less fruitful. An examination of the residential distribution of those non-users who would consider using an improved service versus those who would not consider using it showed no discernible geographic pattern between the two groups.

Finally, there was no discernible geographic pattern among the residential location of those respondents who said that bus service does not go to where they need it to go. Many of these respondents seemed to live directly on a current bus route.

Figure 3: Origin-Destination pairs for potential park and ride customers



Section 7. Summary

Current users of public transit services in the targeted area tend to be younger, single, and with lower incomes when compared to non-users. Among users, 76% live in households earning less than $40,000/year while among non-users, 45% live in households earning less than $40,000/year. There is no difference in use of transit based on gender, although significantly more females drive alone to school than males.

Non-users cited several major drawbacks to using transit—coverage, span, travel time, and frequency. More than half of the employers of the non-users offer free parking although only about a quarter of the school destinations do. Cost of parking and availability of parking were reasons given by users for using public transit services.

Prior transit users who no longer use transit noted that it is mainly due to their increased access to a car and to changes in their travel patterns.

Both users and non-users said they would use transit more if the service were more frequent, took them directly to their destination, and if the fare were reduced or eliminated.

In order for many non-users to become regular users, transit would have to be able to get around traffic congestion whether or not the congestion would get a lot worse, or driving would have to be prohibited in certain areas. The cost of parking would need to increase by $3/day in order to get 50% of the non-users to use transit, provided an express service from a free park-and-ride lot was also offered.

Forty-three percent of the non-users said they would use transit somewhat or much more often than they do now if an EZPass-type program were offered and almost half said they would take transit somewhat or much more often than they do now if a flexible transit service were offered. This flexible transit service would need to leave its basic route to pick up or drop off passengers closer to their destinations.

Non-users' preferences to increase their likelihood of riding public transit include: offering transit services every 10 minutes, providing a transit ride that took only 10 minutes longer than driving, reducing fares by $.50, and requiring no transfer to get to their destination.

In depth analyses were conducted to examine if respondents with certain characteristics were more likely to have similar needs and preferences when compared to respondents not having those same characteristics. Rider preferences or needs did not seem to be driven by a particular respondent characteristic except for the income level, as discussed earlier. In general, the key factors for using transit services were convenience of use and cost.

Using GIS, it was confirmed that users are concentrated in the core areas of Ithaca while a concentration of non-users is evident in the neighborhood just north of downtown. It appears that

many non-users live along existing bus routes while some users do not.

Within the downtown Ithaca area, there appears to be a concentration of respondents who indicated that "increased bus frequency" may make them more likely to use transit for at least some of their trips. In the area north of downtown Ithaca, particularly in the Triphammer Road corridor, there seems to be a concentration of respondents who responded that both "increased frequency" and "service to my destination" are important service changes. There are also relatively more people who identified "service to my destination" as an important change than "increased frequency".

Finally, there seems to be a potential for a park and ride lot with service to Cornell University and perhaps to Ithaca College as well. This possibility will be investigated further in the service planning task of the study.

Appendix A – Survey Questionnaire

Hi, my name is _____. I'm calling from the Cornell University research center on behalf of Ithaca-Tompkins County Transportation Council. We're conducting an important study about transportation issues in your area. This survey will take only 10 to 15 minutes.

SCREENER ONE:

A1. May I speak to the person in the household at least 18 years old with the most recent birthday? IF PERSON WHO ANSWERED WAS NOT RIGHT PERSON, WHEN CORRECT PERSON COMES ON, REPEAT INTRO. IF CORRECT PERSON NOT HOME, SCHEDULE ANOTHER TIME TO CALL.

IF REFUSED, THANK AND TERMINATE 1
AGE 18+ 2

SCREENER TWO: **(NEST Area traveler)**

A2. Do you travel (by any means of transportation but not pure walking trips) at least twice a week to destinations in the area including the City of Ithaca, Cayuga Heights, Village of Lansing, Town of Lansing (not including North Lansing or Lansingville), Dryden or Caroline within ZIP code 14850, or the Town of Ithaca?

YES 1
NO--THANK AND TERMINATE 2

SCREENER THREE: (Non-user status)

A3. In the past 3 months, have you ridden any bus service in the local Ithaca area, such as that operated by TCAT? [IF RESPONDENT DOES NOT KNOW, RECORD AS "NO"]

YES - BUS RIDER – CONTINUE WITH SECTION B, THEN SKIP TO SECTION C 1
NO – CONTINUE WITH SECTION B AND SKIP SECTION C 2

B. MAIN SURVEY

B1. Not including yourself, how many other persons live in your household?____ Persons (household means either your family with whom you are currently living or other people in the household with whom you share income and expense. A household does not include housemates who are only sharing house expense and nothing else.)

1a. How many of them, are under age 16?
1b. How many are between the ages of 16 and 18?
1c. How many are between the ages of 19 and 64?
1d. How many are 65 and older?

[make sure Q1a-Q1d sum to Q1 total]

B2. Do you have a valid driver's license?

YES 1
NO 2
DK/RF 9

B3. Not including yourself, how many other people with a valid driver's license live in your household? ____# People

B3A. COMPUTED # LICENSED DRIVERS IN HOUSEHOLD – SUM B2 AND B3

B4. How many motor vehicles in working condition are in your household? This would include cars, light trucks, and motorcycles. _____# Vehicles

B5. For what purpose or purposes do you regularly make trips into or within the area including downtown Ithaca, Cornell, Cayuga Heights, and the town and village of Lansing? [NOTE: Cornell faculty and staff traveling to the campus should respond "Work" and not "School/University classes" unless they happen to be taking a course as a student.]

Multiple Response

Work 1
Business related to work 2
School/University classes 3
Shopping 4
Social/recreational 5
Personal business (medical appointments, banking, etc.) 6
Religious 7
Other: specify_____ 97
DK/RF 99

B6. What is your home address, or the nearest street intersection to your home (plus town name)? This information will be kept completely confidential and will be used only to develop an overall portrait of travel patterns in the area.

B7. What is the address of your workplace or the street intersection nearest to it? This information will be kept completely confidential and will be used only to develop an overall portrait of travel patterns in the area. (Note if respondent states that they are not employed.) [If respondent works on the Cornell campus but does not know the address, try to get a building name.]

B7a. [If B5@3=1] What is the address of your school/University, the building name, or the street intersection nearest to it? This information will be kept completely confidential and will be used only to develop an overall portrait of travel patterns in the area.

Worker Questions (IF B5=1 or 2)

W1. How do you typically travel to work?

Car- drive alone	1
Get a ride	2
Carpool/Vanpool	3
Taxi	4
Bike	5
Walk	6
Varies	7
Other: specify_____	97
DK/RF	99

W1A. [If W1 = 7] What are the various means that you typically use to get to work on a regular basis? (MULTIPLE RESPONSES)

Car- drive alone	1
Get a ride	2
Carpool/Vanpool	3
Taxi	4
Bike	5
Walk	6
Other: specify_____	97
DK/RF	99

W2. How long door-to-door does it typically take for you to get to work (one-way)?
_____ DOOR-TO-DOOR TRAVEL TIME IN MINUTES

W3. How many days per week do you usually work? _____ DAYS

W3a. Which days of the week do you work? [IF IT VARIES, ASK ABOUT PREVIOUS WEEK]

MONDAY	1
TUESDAY	2
WEDNESDAY	3
THURSDAY	4
FRIDAY	5
SATURDAY	6
SUNDAY	7
DK/RF	9

W3b. Of these, how many days per week, on average, do you work at home instead of going into the office (sometimes referred to as “telecommuting”)? _____ DAYS

INTERVIEWER NOTE: THIS DOES NOT INCLUDE BRINGING WORK HOME TO DO AFTER A DAY IN THE OFFICE.

W4. Do you work a fixed schedule or are your hours flexible?

FIXED	1
FLEXIBLE	2

W5. To the best of your knowledge, do the benefits offered by your employer include any of the following? *(Multiple response)*

Partial payment (or subsidy) of public transit fares	1
Partial payment (or subsidy) of parking	2
Free parking	3
NONE OF THE ABOVE	4
DK/RF	9

W6. At what time do you usually leave from home to go to work?

BEFORE 6AM	1
6 AM – 7 AM	2
7 AM – 8 AM	3
8 AM – 9 AM	4
9 AM – 10 AM	5
10 AM – 3 PM	6
3 PM – 4 PM	7
4 PM – 5 PM	8
5 PM – 6 PM	9
6 PM – 8 PM	10
AFTER 8 PM	11
NO USUAL TIME	12

W7. At what time do you usually leave from work to return home?

BEFORE 6AM	1
6 AM – 7 AM	2
7 AM – 8 AM	3
8 AM – 9 AM	4
9 AM – 10 AM	5
10 AM – 3 PM	6
3 PM – 4 PM	7
4 PM – 5 PM	8
5 PM – 6 PM	9
6 PM – 8 PM	10
AFTER 8 PM	11
NO USUAL TIME	12

Student Questions (If B5=3)

S1. How many days per week do you usually go to school? _____ DAYS

S1a. Which days of the week do you go to school?

MONDAY	1
TUESDAY	2
WEDNESDAY	3
THURSDAY	4
FRIDAY	5
SATURDAY	6
SUNDAY	7
DK/RF	9

S2. How do you typically travel to school?

Car- drive alone	1
Car – ride with others	2
Carpool/Vanpool	3
Taxi	4
Bike	5
Walk	6
Other: specify_____	97
DK/RF	99

S3. How long door-to-door does it typically take you to go to school (one-way)?
_____ DOOR-TO-DOOR TRAVEL TIME IN MINUTES

S4. To the best of your knowledge, does your school offer any of the following?
(Multiple response)

Partial payment (or subsidy) of public transit fares	1
Partial payment (or subsidy) of parking	2
Free parking	3
NONE OF THE ABOVE	4
DK/RF	99

S5. At what time do you usually leave from home to go to school?

BEFORE 6AM	1
6 AM – 7 AM	2
7 AM – 8 AM	3
8 AM – 9 AM	4
9 AM – 10 AM	5
10 AM – 3 PM	6
3 PM – 4 PM	7
4 PM – 5 PM	8
5 PM – 6 PM	9
6 PM – 8 PM	10
AFTER 8 PM	11
NO USUAL TIME	12

S6. At what time do you usually leave from school to return home?

BEFORE 6AM	1
6 AM – 7 AM	2
7 AM – 8 AM	3
8 AM – 9 AM	4
9 AM – 10 AM	5
10 AM – 3 PM	6
3 PM – 4 PM	7
4 PM – 5 PM	8
5 PM – 6 PM	9
6 PM – 8 PM	10
AFTER 8 PM	11
NO USUAL TIME	12

Service Preferences

P1. If transit service were available so that it was easy to use, convenient, inexpensive, and information about using it was readily available, would you personally consider using it for some of your transportation needs?

YES	1
NO	2
DK/RF	9

P2A. [IF P1=1] Would you use it…

For all trips	1
For most trips	2
Only occasionally	3
Rarely	4
DK/RF	9

P2B. [IF P1=1] What type of trip would you most likely use public transit service for?
Multiple Response

Work	1
Business related to work	2
School/University classes	3
Shopping	4
Social/recreational	5
Personal business (medical appointments, banking, etc.)	6
Religious	7
Other: specify_____	97

STATED PREFERENCE QUESTIONS

SP0. [IF P2A= 1 or 2, SP0="4 days per week"
IF P2A= 3 or 4, SP0="4 days per month"
IF P1= 2, skip the following questions and continue with P3]

Now we are going to ask you to estimate your likelihood of using a number of different hypothetical transit services. Each of the hypothetical services should be judged against the following baseline service. Assume that in all cases the service would operate within walking distance of your typical origin and destination locations (your home and your job, for instance).

The baseline service would operate Monday through Saturday from 7:00 a.m. to 9:00 p.m. It would be operated with regular, large diesel buses similar to those used by TCAT. Buses would run every 30 minutes at all times. For trips to downtown Ithaca and Cornell, you would have a one seat ride, but for some other destinations, you would have to transfer. The fare would be $1.00 for adults, 75 cents for children and 50 cents for seniors. The travel time would take about 20 minutes longer than driving door to door.

SP1. What would be the likelihood on a scale of 1 to 10 with 10 being most likely that you would use this baseline service at least [SP0]?

SP2. If instead of Monday through Saturday 7:00 a.m to 9:00 p.m., the service ran weekdays only from 6:00 a.m. to midnight, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP3. If instead of Monday through Saturday 7:00 a.m to 9:00 p.m., the service ran every day from 7:00 a.m. to 7:00 p.m., how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP4. If the baseline service used smaller, quieter buses instead of large diesel buses, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP5. If the baseline service used low-floor shuttle vans instead of large diesel buses, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP6. If the baseline ran every 20 minutes instead of every 30, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP7. If the baseline ran every 10 minutes instead of every 30, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP8. If you could get anywhere in the area with no transfers, compared to the one transfer needed in the baseline service, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP9. If the fare were 50 cents higher than the baseline service, or if passes were 50% more expensive, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP10. If the fare were 50 cents lower than the baseline service, or if passes were 50% less expensive, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

SP11. If transit service only took 10 minutes longer door to door than driving, instead of taking 20 minutes longer, how likely would you be to ride the service at least [SP0], on a scale of 1 to 10?

P3. You don't ride transit now, but when was the last time you rode transit in your region? How many months ago would you say it was?

WITHIN PAST 6 MONTHS	1
AT LEAST 6 MONTHS AGO BUT NOT MORE THAN 1 YEAR AGO	2
MORE THAN 1 YEAR AGO	3
NEVER – SKIP TO P6	4
DK/RF	9

P4. [IF P3<4] To what extent did you rely on transit to get around at that time?

Almost never	1
Less than once per week (once in a while)	2
Once per week	3
2 or 3 times per week	4
4 or more times per week	5
DK/RF	9

P5. [IF P4 = 3, 4 or 5] Why did you stop riding transit?

MULTIPLE RESPONSE (do not need to read)

INCREASED ACCESS TO CAR	1
CHANGE IN TRAVEL PATTERN (CHANGED JOBS, MOVED, ETC.)	2
LENGTH OF TRIP; BUS TOO SLOW	3
TOO MANY TRANSFERS	4
TRAVELING WITH CHILDREN NOW	5
BUS DIDN'T COME OFTEN ENOUGH	6
NOT RELIABLE ENOUGH; NOT AT BUS STOP ON TIME	7
DIDN'T GO WHERE I NEED IT TO	8
DIDN'T GO WHEN I NEED IT TO	9
TOO EXPENSIVE (FARE TOO HIGH)	10
PARKING BECAME AVAILABLE/LESS EXPENSIVE	11
OTHER: SPECIFY _____	97
DK/RF	99

P6. If you needed to ride transit for whatever reason, how would you get information on routes and schedules? [Listen for any of the following … ONLY READ CHOICES IF THEY HAVE NO IDEA…MULTIPLE RESPONSE ALLOWED]

Ask a bus driver	1
Ask a friend	2
Call transit agency	3
Go to nearest bus stop	4
Website/internet information	5
Public library	6
TCAT Transit Center	7
Transportation Office	8
Willard Straight Hall Ticket Office	9
Day Hall IRC	10
Logos Bookstore	11
Textor Hall at Ithaca College	12
Center Ithaca	13
The Commons	14
Other: specify_____	97
DK/RF	99

P7. In your mind, what's the one biggest drawback to taking transit? READ CHOICES (rotate – only one response allowed. If respondent says "all of the above" or "more convenient", try to get them to select one response. Do not enter "more convenient" or "all of the above" under "Other")

LENGTH OF TRIP; BUS TOO SLOW	1
TOO MANY TRANSFERS	2
BUS DOESN'T COME OFTEN ENOUGH	3
BUS IS NOT RELIABLE ENOUGH; NOT AT BUS STOP ON TIME	4
DOESN'T GO WHERE I NEED IT TO	5
DOESN'T GO WHEN I NEED IT TO	6
TOO EXPENSIVE (FARE TOO HIGH)	7
COMPLICATED TO KNOW HOW TO USE TRANSIT	8
NO DRAWBACKS	9
Other: specify _____	97
DK/RF	99

P8. You don't ride the bus now, but which one of the following changes to transit service might make you more willing to use it for at least some trips? (READ CHOICES) MULTIPLE RESPONSE ALLOWED

If bus service took me between where I am and where I'm going to	1
If bus service traveled faster	2
If bus service were more frequent	3
If the service were more reliable	4
If the service ran later in the evening	5
If I had better information about how to use the system	6
If I had better information about when the bus would actually arrive at my stop	7
If buses were more comfortable	8
If bus stops had better shelters	9
If the buses were smaller and more neighborhood-oriented	10
If the fare were reduced or eliminated	11
NOTHING	12
SOMETHING ELSE? (SPECIFY)	97

P8A. Of the changes you chose, which are the two most important?

Item 1_____
Item 2_____

P9. Assuming bus service is convenient and reliable, which of the following transportation-related changes would make you seriously consider becoming a regular transit user? MULTIPLE RESPONSE ALLOWED – read each one.

If traffic congestion stayed the same and transit were able to get around the congestion	1
If traffic congestion got a lot worse and transit were able to get around the congestion	2
If parking at the destination of my trips got more expensive	3
If people were prohibited from driving into certain parts of Ithaca	4
If the price of gasoline more than doubled	5
NOTHING	9
SOMETHING ELSE? (SPECIFY)	97

P9A. Of the changes you chose, which is the most important?

Item 1_____

P10. [IF P9=3] Assuming that you could park for free at a remote lot and have an express shuttle to your destination, how much would the daily charge for parking at your destination have to increase to get you to become a regular transit user? [START AT $0 AND GO UP BY $1 INCREMENTS UNTIL RESPONDENT STOPS YOU]

Final amount_____

P11. EZ Pass is a program that you may have heard of, where drivers set up an account in advance, and are automatically billed for all trips they make on the NY Thruway. If you had the option of setting up a **transit** travel account that would let you ride public transit without having to buy a pass or pay cash for fares (instead you would be billed monthly for all of the trips you make), how would this affect your use of transit? Would you say that with this type of account program, you would ride the bus much more often, somewhat more often, as often as you do now, or less often than you do now?

Much more often	1
Somewhat more often	2
As often as you do now	3
Less often	4
DK/RF	99

P12. If you did set up a transit account, or used a monthly transit pass, and a new program allowed the **free** use of emergency transportation, so that you could be returned home immediately by taxi up to 5 times per year, how would this affect your use of transit? Would you say that you would ride the bus much more often, somewhat more often, as often as you do now, or less often than you do now?

Much more often	1
Somewhat more often	2
As often as you do now	3
Less often	4
DK/RF	99

P13. If a new, more flexible transit service was established, that could leave its basic route to pick up or drop off passengers closer to their homes or other destinations before returning to its route, how would this affect your use of transit? Assume that you would have to call 30 minutes in advance to schedule a pick up, or could subscribe to such a service for trips you make regularly. Would you say that you would ride the bus much more often, somewhat more often, as often as you do now, or less often than you do now?

Much more often	1
Somewhat more often	2
As often as you do now	3
Less often	4
DK/RF	99

Current Rider Questions [SKIP IF A3=2]

C1. For what type of trips do you use TCAT bus service in the Ithaca area?
Multiple Response

Work	1
Business related to work	2
School/University classes	3
Shopping	4
Social/recreational	5
Personal business (medical appointments, banking, etc.)	6
Religious	7
Other: specify_____	97
DK/RF	99

C2. What are the main reasons that you use transit instead of some other means such as using a car?
Multiple Response (do not read options)

Do not have a car	1
Transit is cheaper than driving	2
Transit is better for the environment	3
Hard to find parking	4
Parking is expensive	5
Transit is faster than driving	6
I hate driving in traffic	7
I like the social aspect of transit	8
Other (SPECIFY)	9

C3. How many days per week do you usually use transit? _____ DAYS

C3a. Which days of the week do you use transit?

MONDAY	1
TUESDAY	2
WEDNESDAY	3
THURSDAY	4
FRIDAY	5
SATURDAY	6
SUNDAY	7
IT VARIES	8
DK/RF	9

C4. [IF NUMBER OF DAYS IS LESS THAN 5] Could you use transit more often than you currently do?

YES	1
NO	2
DK/RF	9

C4A. [IF C4=1] What would make you take more trips on transit?

Multiple Response

If bus service took me to more destinations	1
If bus service were faster	2
If bus service were more frequent	3
If the service were more reliable	4
If the service ran later in the evening	5
If I had better information about how to use the system	6
If I had better information about when the bus would actually arrive at my stop	7
If buses were more comfortable	8
If bus stops had better shelters	9
If the buses were smaller and more neighborhood-oriented	10
If the fare were reduced or eliminated	11
Other (SPECIFY)	12

C4B. [IF C4=1] For what types of additional trips would you use transit? (DELETE FROM LIST ANY CHOICES CHOSEN IN C1)

Multiple Response

Work	1
Business related to work	2
School/University classes	3
Shopping	4
Social/recreational	5
Personal business (medical appointments, banking, etc.)	6
Religious	7
Other: specify_____	97
DK/RF	99

Demographic Questions [ALL RESPONDENTS]

D1. What is your marital status?

Married or PARTNER	1
Divorced	2
Widowed	3
Single/never married	4
RF	9

D2. [IF D1=1: And is your spouse/partner employed?

YES	1
NO	2
RF	9

D3. Into which of the following age categories do you fall?

under 18	1
18-24	2
25-34	3
35-44	5
45-54	6
55-64	7
65-74	8
75+	9
DK/RF	99

D4. In considering the 2001 combined annual income before taxes of all members of your household, could you tell me if it is above or below $60,000? (household means either your family with whom you are currently living or other people in the household with whom you share income and expense. A household does not include housemates who are only sharing house expense and nothing else.)

ABOVE	1
BELOW	2
DK/RF	9

D5. Which of the following income categories best represents your household? [READ ONLY RELEVANT OPTIONS BASED ON ANSWER TO D4.]

Under $20,000	1	At least $60,000 but less than $80,000	4
At least $20,000 but less than $40,000	2	At least $80,000 but less than $100,000	5
At least $40,000 but less than $60,000	3	Over $100,000	6
DK/RF	99		

D6. IF RESPONDENT REFUSES: I understand your reluctance to share this kind of information, but let me assure you that it is completely confidential. It's important for us to collect this type of information so we can be sure we have a representative sample of people in your community. Your answers will be combined with other people like yourself and will remain anonymous. REASK D5 – Could you tell me which of the following income categories best represents your household – SAME CODES

D7. Do you have access to the Internet?

YES	1
NO	2
DK/RF	99

D8. [IF D7=1] Is that at home, at work, or at school? (multiple response)

home	1
work	2
school	3
Other: specify:_____	7
DK/RF	99

D9. [NOT ASKED – CODED BY OBSERVATION] GENDER

MALE	1
FEMALE	2

D10. And for validation purposes, may I have your first name? _____

D11. And I'd like to confirm that I reached you at [PHONE NUMBER]. [IF NUMBER DIFFERENT FROM DIALED, ASK IF PHONE WAS FORWARDED.]

Those are all the questions I have for you today. Thank you for your time and participation in this very important survey.